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A laminated sheet for the display of information

The invention relates to a laminated sheet for the display of information, said sheet comprising a lower base layer which consists of a print layer having a protective layer laminated on its upper side.

Laminated sheets of the above-mentioned type are used for advertisements which are provided on the print layer. These advertisements are placed on walls or columns, where, of course, they are not subjected to wear.

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An alternative to placing advertisements on walls and columns is to place them on road surfaces, where they are affected by the wheels of vehicles or pedestrians stepping on the sheet.

15 Clearly, sheets placed on road surfaces must be very wear-resistant and must be capable of tolerating repeated impacts, without the advertisement getting blurred or directly damaged.

A laminated sheet intended for use outdoors is known from US Patent No. 6,180,228. Though this known sheet has good strength properties, it is an object of the invention to provide a sheet which is even more wear-resistant and at the same time more flexible.

The object of the invention is achieved by a laminated sheet of the type defined in the introductory portion of claim 1, which is characterized in that a net layer of polyester is laminated below the print layer.

The polyester layer will increase the strength and the flexibility of the sheet.

30 Expediently, as stated in claim 2, the print layer may consist of a rubber material, or, as stated in claim 3, of a laminate which consists of PVC and a

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plastics/adhesive layer.

If it is desired to attach the sheets according to the invention to a surface, this may advantageously be done in that, as stated in claim 5, a glue and a film are laminated below the polyester layer.

To improve the strength of the sheet additionally, it is advantageous if, as stated in claim 6, a plastics/adhesive layer and a PVC layer are laminated between the polyester layer and the glue, which makes the sheet suitable for use on surfaces which are subjected to wear, such as road surfaces carrying traffic of lightweight as well as heavy vehicles.

To resist mechanical impacts on the upper side of the sheet according to the invention, it is an advantage if, as stated in claim 7, the frictional layer consist of glass beads and broken glass.

To ensure that impacts along the outer edge of the sheet, e.g. impacts from the wheels of vehicles, do not cause the sheet to be worn or torn, it is an advantage if, as stated in claim 8, the thickness of the total sheet is in the range from 0.3 mm to 2.5 mm or from 3 to 12 mm, where the smallest range is in connection with sheets having many layers, while the greatest range is in connection with sheets having fewer layers.

The invention will now be explained more fully with reference to the drawing, in which

- fig. 1 shows a laminated sheet according to the invention greatly enlarged in a first embodiment, while
- fig. 2 shows a laminated sheet according to the invention greatly enlarged in a second embodiment.

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In both figures, the numeral 1 designates a frictional layer or a wear-resistant layer or a non-skid layer or the like, while the numeral 2 designates a polyurethane layer. The numeral 3 designates a print, which may be a silk screen print provided with colours and solvents, or a digital print.

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In fig. 1, the print 3 is provided on a layer of rubber material 4, while in fig. 2 it is provided on a laminate which consists of a PVC 8 and a plastics/adhesive layer 9.

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A polyester layer 5 is applied below the rubber layer 4 in fig. 1 and below the laminate of the PVC 8 and the plastics/adhesive layer 9. A glue 6 and a film 7 are applied below the polyester layer 5 in fig. 1, while a plastics/adhesive layer 10, a PVC layer 11, a glue 6 and a film 7 are laminated below the polyester layer in fig. 2.

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It should be noted that the glue layers and the film layers, which are shown in both figures, may be omitted, and that the sheet in fig. 3 is slightly less expensive to manufacture than the sheet in fig. 1, which, however, is stronger than the sheet in fig. 2.

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